

CLAIMS

1. A method of operating a gas-discharge lamp, preferably a fluorescent lamp (10), wherein the lamp is operated at least in part with a dc voltage component,  
characterised in that  
voltage pulses are superimposed on the lamp dc voltage component.

2. A method of operating a gas-discharge lamp, preferably a fluorescent lamp (10),  
characterised in that  
the lamp is operated in the upper brightness range with dc voltage, with dc voltage and superimposed voltage pulses or with preferably high-frequency ac voltage while it is operated in the lower brightness range with dc voltage and superimposed voltage pulses or only with voltage pulses.

3. A method according to claim 1 or claim 2 characterised in that the voltage pulses are sinusoidal and decaying.

4. A method according to one of claims 1 to 3 characterised in that the voltage pulses have a repetition rate of at least 100 Hz and a natural frequency which is higher than the repetition rate.

5. A method according to one of the preceding claims characterised in that to reduce the brightness of the lamp the dc voltage component is reduced, preferably to zero.

6. A method according to one of the preceding claims characterised in that to reduce the brightness of the lamp the repetition rate of the pulses is reduced.

7. A method according to one of the preceding claims characterised in that to reduce the brightness of the lamp the voltage or the energy of the pulses is reduced.

8. A method according to one of the preceding claims characterised in that to reduce the brightness of the lamp the natural frequency of the pulses is increased.

9. A method according to one of the preceding claims characterised in that the lamp is repeatedly subjected to pole reversal.

10. A method according to one of the preceding claims characterised in that the cathode of the lamp is heated, wherein the heating power is only selected to be so great that an increase in the heating power does not cause any further reduction in the running voltage of the lamp.

11. A power supply unit (11) for carrying out the method according to one of the preceding claims characterised in that a running voltage source (13) for supplying the dc voltage and a pulse source (12) for supplying the voltage pulses are provided or can be connected.

12. A power supply unit according to claim 11 characterised in that means (15.1, 15.2) for heating the lamp electrodes (16.1, 16.2), means (17) for pole reversal of the lamp and/or means (14) for measuring the lamp running voltage are provided or can be connected.